

SUBJECT: HAI EXCEPTION UPDATE

Aim

The purpose of this paper is to update Board members of the current status of Healthcare Associated Infections (HAIs) and any exceptions that need to be highlighted out with the bi monthly board report.

Background

There is a national mandatory requirement for a Healthcare Associated Infection Control report to be presented to the Board on a bi monthly basis utilising the nationally agreed template. It has been agreed in NHSL that an exception report will be submitted alternately. The next full report will be submitted to the Board in December 2010.

1. Board Wide Issues

Key Healthcare Associated Infection Headlines for November 2010

- NHS Lanarkshire HAI team have been invited to speak at the 7th Scottish Patient Safety Learning Event being held at the SECC in Glasgow on the 16th and 17th November 2010. The title of the presentation is "Leadership and Infection Prevention and Control" and is an opportunity for the service to share the progress we have made in relation to reduction of SABs by joint working and integration with the Scottish Patient Safety Programme
- Antibiotic resistance is now an everyday problem in hospitals across Europe. The selection and spread of resistant bacteria in hospitals is a major patient safety issue. This year's European Antibiotic Awareness Day is on 18 November 2010 and the focus is to promote prudent antibiotic use in hospitals. The primary target audience is antibiotic prescribers in hospitals and the secondary audiences are hospital managers, hospital pharmacists and antibiotic stewardship committees. NHSL will be supporting the event and raising local awareness within primary care and across the 3 acute sites on the 18th November between 10am and 4 pm.
- Actichlor Plus has been introduced initially within the acute sites in NHSL Lanarkshire for all staff to facilitate optimum decontamination of shared patient equipment, where recommended, to negate the risk of cross-infection. The process will also be rolled out to primary care. Previously only Actichlor was used by nursing staff and as this did not contain a detergent, required staff to undertake additional cleaning of equipment prior to final decontamination using the Actichlor product
The benefits of the use of one solution by both nursing and domestic staff are that it will lead to consistency of practice and standards and is aligned with Releasing Time to Care in minimising the time and effort required to achieve effective decontamination of the environment and patient equipment. In addition the introduction of Actichlor Plus has replaced the range of existing chlorine releasing products and is aligned with LEAN

methodology as fewer products require to be stored at ward level. Decontamination refresher training on the use of Actichlor Plus has commenced and visual aids re dilution of the product and PPE have been introduced. In addition the use of one product instead of 2 has reduced both staff time and procurement costs.

2. Healthcare Environment Inspection (HEI) Wishaw General

The final announced Healthcare Environment Inspection was undertaken at Wishaw General on the 28th and 29th of September and the final report was published on the 8th November 2010. The inspection resulted in four requirements and five recommendations. The requirements are linked to compliance with the NHS QIS HAI standards. An action plan for areas of improvement has been developed by NHS Lanarkshire and is available to view on the NHS QIS website <http://www.nhshealthquality.org/nhsqis/7876.html>

Overall the Inspection team found evidence that NHS Lanarkshire are complying with the majority of NHS QIS HAI standards to protect patients, staff and visitors from the risk of acquiring an infection. In particular:

- patients with known infections are being risk assessed and cared for appropriately in dedicated isolation facilities
- there are good arrangements in place for the prescribing of antimicrobial drugs
- the infection control manual is being kept up to date, and
- A learning strategy has been developed to include the provision of HAI training for all NHS Lanarkshire staff.

However, the Inspection team also found that further improvement is required in the following areas:

- the monitoring and the standard of cleanliness in Wishaw General Hospital requires to be reviewed
- a system of auditing bed mattresses requires to be implemented, and
- The NHS Lanarkshire staff uniform policy and the use of staff changing facilities at Wishaw General Hospital are required to adhere to national guidelines.

In response to the issues requiring improvement;

- We have already met with Directors from Serco, our service provider at Wishaw General Hospital .Serco has responded very positively and is undertaking a full review of current ways of working. The outcome of this review will identify how further improvements can be made. This is being taken forward in close conjunction with NHS Lanarkshire's infection control team. Some immediate actions have already been undertaken and include the replacement of the current dry static dust collection with vacuum /suction collection to control the dust referred to in the report.
- We have undertaken a PDSA of a system to audit mattresses and are currently proposing 2 further systems in order to ensure the system implemented is sustainable
- The Clinical Uniform/Dress Code Policy went to the Joint Policy Forum on the 21st of September and a decision has been made to set up a short life working group to further develop this policy. NHSL need to ensure all aspects of public perception as well as infection control and staff comfort are being considered and incorporated into this updated policy. We are also making reference to the most recent guidance both from within NHS

Scotland as well as the DOH in England. There will be an associated challenge with the policing of the new policy as many staff travel across the three sites in uniform as part of their specialist role

2.1 Healthcare Environment Inspection Follow-up visit Hairmyres Hospital

The Regional Inspector from the HEI team returned to Hairmyres Hospital on the 4th November 2010 to review improvement against the action plan submitted in June 2010. Core members of the HEI steering group talked through the action plan and presented related evidence to demonstrate changes to process as required as part of the requirements and recommendations from the Hairmyres Report. In recent email communication related to the visit, the regional Inspector advised;

“It has given me a good idea of the actions you have taken to address the areas for improvement highlighted by the inspection”

2.2 Healthcare Environment Inspection Monklands General Hospital

Monklands General Hospital continue to address the requirements identified at the other 2 sites and continue with their local multidisciplinary hygiene group in preparation for forthcoming unannounced Inspections.

All NHS Boards are now subject to unannounced Inspections and the NHSL HEI steering group will continue to meet in order to ensure good practice is shared across the three sites

3. *Staphylococcus aureus* (including MRSA)

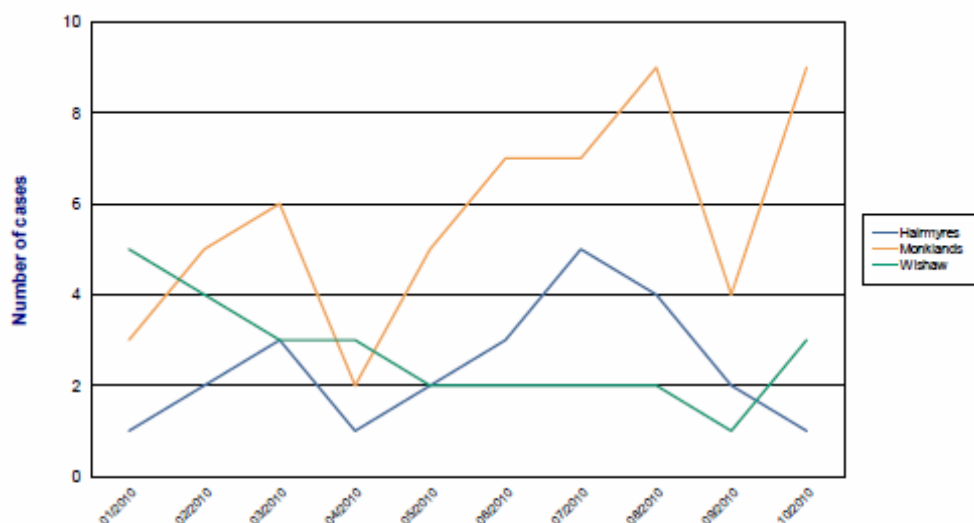
Current HEAT Status

Following achievement of previous 35% reduction of *Staphylococcus aureus* bacteraemia rates (SAB) by March 2010, NHSL continues to make good progress towards meeting its further 15% reduction of SAB to meet the HEAT target for 2010/2011

Table 1: *Staphylococcus aureus* bacteraemias by month and acute hospital

Staphylococcus aureus bacteraemia cases by month and acute hospital (MRSA & MSSA), Date range: 01/01/2010 - 31/10/2010

Staph. aureus Bacteraemia cases by Month and Acute Hospital (MRSA & MSSA)

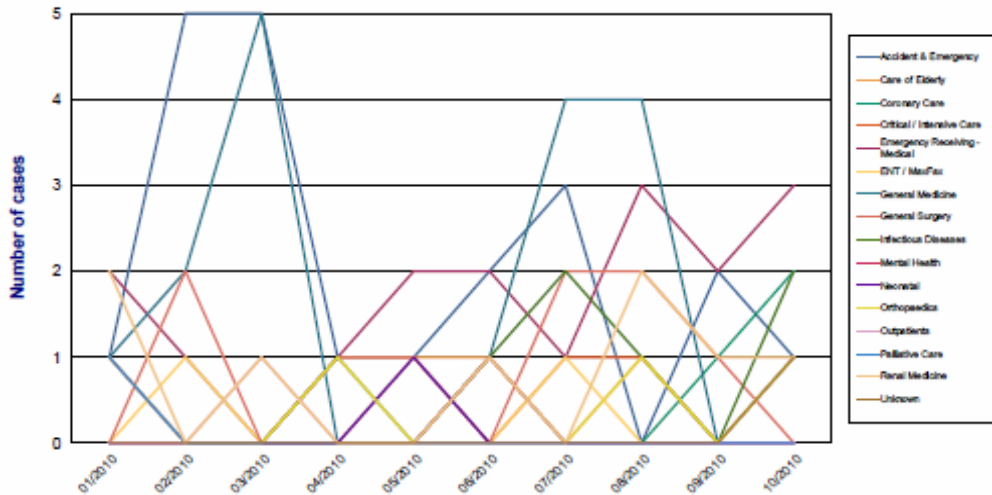


	Hairmyres	Monklands	Wishaw	Totals
01/2010	1	3	5	9
02/2010	2	5	4	11
03/2010	3	6	3	12
04/2010	1	2	3	6
05/2010	0	5	2	7
06/2010	3	7	0	10
07/2010	5	7	2	14
08/2010	4	9	2	15
09/2010	2	4	1	7
10/2010	1	9	3	13
Totals	22	57	25	104

Table 1. Highlights that the number of *Staphylococcus aureus bacteraemia* (SAB'S) per acute hospital. In October there was an increased incidence of SAB's at Monklands Hospital. All cases were MSSA and most of the cases were patients who were critically ill on admission with multiple risk factors. The enhanced surveillance data is currently being reviewed to identify the potential primary sources of infection and contributing factors in order to feedback to the ward staff and to ensure that action where required is taken

Table 2: *Staphylococcus aureus* bacteraemias (SABs) per acute specialties
Date range: 01/01/2010 - 31/10/2010

Staph. aureus Bacteraemia cases by Month and Acute Specialty (MSSA & MRSA)



	Accident & Emergency	Care of Elderly	Coronary Care	Critical / Intensive Care	Emergency Receiving - Medical	ENT / Max/Fax	General Medicine	General Surgery	Infectious Diseases	Mental Health	Neonatal	Orthopaedics	Outpatients	Palliative Care	Renal Medicine	Unknown	Totals
01/2010	1	1	0	1	2	0	1	0	0	0	0	1	0	1	2	0	10
02/2010	5	0	0	0	1	1	2	2	0	0	0	0	0	0	0	0	11
03/2010	5	0	0	0	0	0	5	0	0	0	0	0	1	0	1	0	12
04/2010	1	1	0	0	1	0	0	1	1	0	0	1	0	0	0	0	6
05/2010	1	1	0	1	2	0	0	1	0	0	1	0	0	0	0	0	7
06/2010	2	1	1	0	2	0	1	0	1	1	0	0	0	0	1	0	10
07/2010	3	0	0	1	1	1	4	2	2	0	0	0	0	0	0	0	14
08/2010	0	1	0	1	3	0	4	2	1	0	0	1	0	0	2	0	15
09/2010	2	0	1	0	2	0	0	1	0	0	0	0	0	0	1	0	7
10/2010	1	0	2	1	3	0	1	0	2	0	0	1	0	0	1	1	13
Totals	21	5	4	5	17	2	18	9	7	1	1	4	1	1	8	1	105

Table 2

Highlights the number of *Staphylococcus aureus bacteraemia* per acute specialty reported since January 2010. The highest numbers are in Accident and Emergency (21), General Medicine (18), and Emergency Receiving (17). These figures are in keeping with national findings and reflect where the specimens were obtained, and not necessarily where the SABs were acquired. The enhanced surveillance data continues to be reviewed to determine hospital or community association and is presented in the bi monthly HAIRT template

4. Clostridium difficile infection (CDI)

NHS Lanarkshire is currently on trajectory to meet our HEAT target. Revision of the *Clostridium difficile* HEAT Target for 2011 in May 2010 now gives NHSL a HEAT Target to reduce the rate of *Clostridium difficile* infection in over 65 years old by at least 50% by 2011 (Target rate 1.00/1000 AOBDS > 65 years old).

The HPS report published on 6th October quotes that Lanarkshire shows a significant decrease when a comparison of the yearly rates between July 2008-June 2009 and July 2009-June 2010 was made.

Our exact figures for the most recent quarter are 57 episodes (>65 years old) giving a rate of 0.47 cases > 65 years old / 1000 OCBDs for the quarter up to June 2010 and an annual figure (up to Dec 09) of 0.60 cases > 65 years old / 1000 OCBDs. This compares with an original HEAT target of 1.00 cases > 65 years old / 1000 OCBDs or a revised target of 406 episodes (50% reduction) in the next 12 months.

Table 3: *Clostridium difficile* by month and acute hospital
Date range: 01/01/2010 - 31/10/2010

C. Difficile cases by Month and Acute Hospital

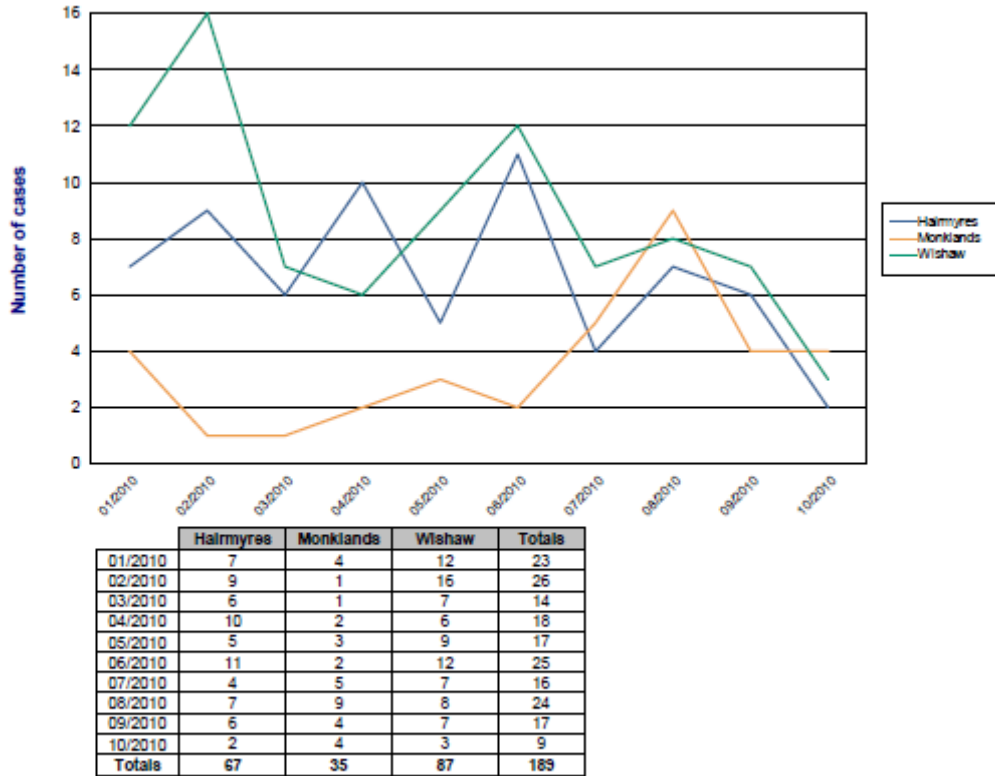
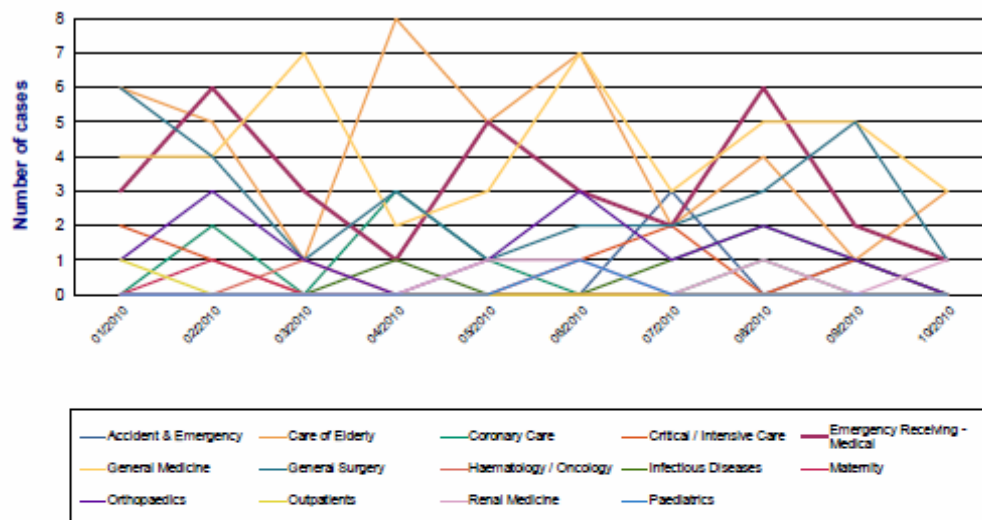


Table 3 above shows *Clostridium difficile* by month and acute hospital. Hairmyres and Wishaw General Hospital have both shown a marked reduction in their CDI cases in October 2010, and Monklands have remained static. Enhanced surveillance data confirms that of the 9 cases identified in October 2 of these were community associated.

Table 4: Clostridium difficile infection rates per acute specialities
Date range: 01/01/2010 - 31/10/2010

C. Difficile cases by Month and Acute Speciality



	Accident & Emergency	Care of Elderly	Coronary Care	Critical / Intensive Care	Emergency Receiving - Medical	General Medicine	General Surgery	Haematology / Oncology	Infectious Diseases	Maternity	Orthopaedics	Outpatients	Renal Medicine	Paediatrics	Totals
01/2010	0	6	0	2	3	4	6	0	0	0	1	1	0	0	23
02/2010	0	5	2	1	6	4	4	0	0	1	3	0	0	0	26
03/2010	0	1	0	0	3	7	1	1	0	0	1	0	0	0	14
04/2010	0	8	3	0	1	2	3	0	1	0	0	0	0	0	18
05/2010	0	5	1	0	5	3	1	0	0	0	1	0	1	0	17
06/2010	0	7	0	1	3	7	2	0	0	0	3	0	1	1	25
07/2010	3	2	0	2	2	3	2	0	1	0	1	0	0	0	16
08/2010	0	4	1	0	6	5	3	0	2	0	2	0	1	0	24
09/2010	1	1	0	1	2	5	5	0	1	0	1	0	0	0	17
10/2010	0	3	0	0	1	3	1	0	0	0	0	0	1	0	9
Totals	4	42	7	7	32	43	28	1	5	1	13	1	4	1	185

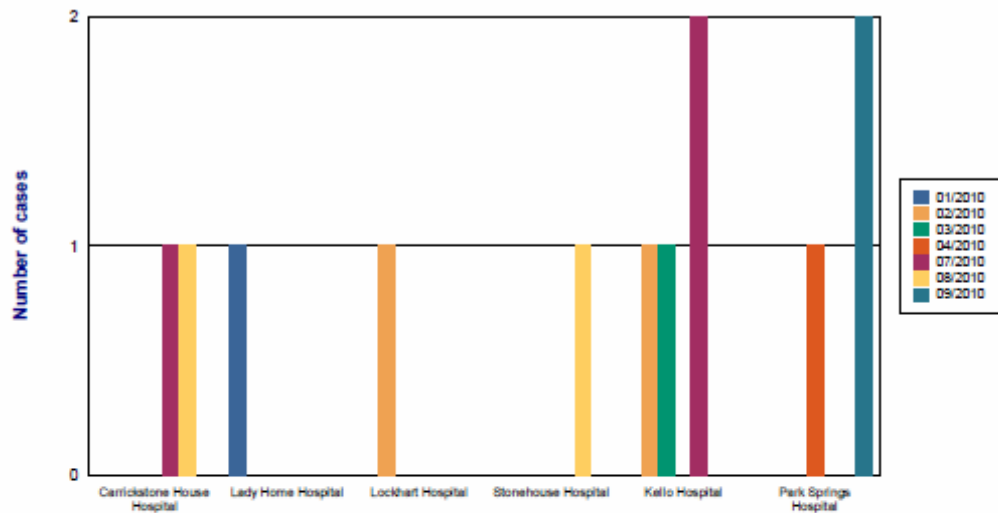
Table 4 above shows Clostridium difficile infection rates per acute specialities and continues to demonstrate that the population most at risk of acquiring CDIs are within the Care of the Elderly and Medical wards

The figures report where the episode was identified and not necessarily where the cause originated. The enhanced surveillance data continues to be reviewed to determine if the CDIs were hospital or community associated and action taken where necessary to prevent further cases. This information is presented in the bi-monthly HAIRT report.

Table 5: Clostridium difficile infection rates by month - Community Hospitals

Date range: 01/03/2010 - 30/09/2010

C. Difficile cases by Month and Community Hospital



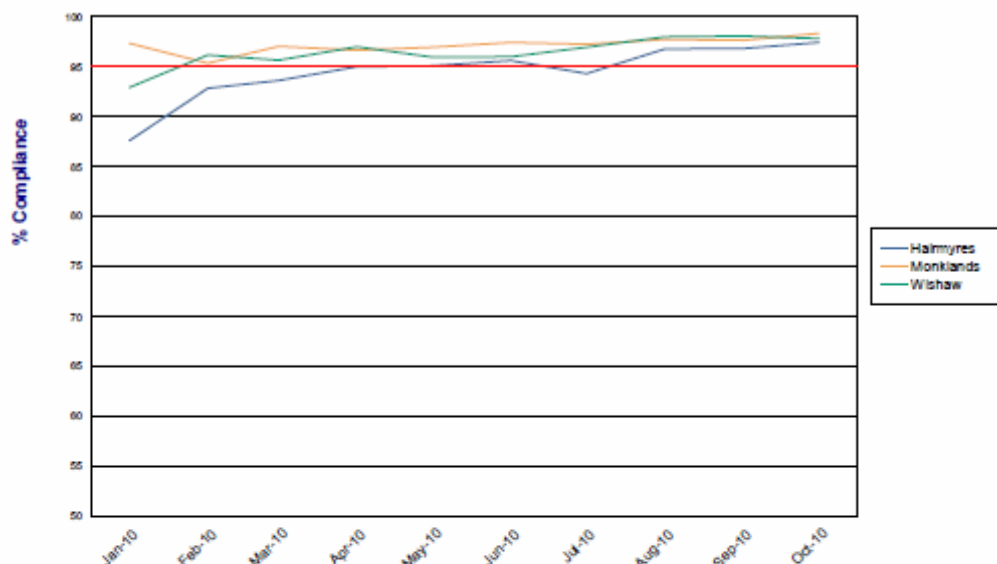
	Carrickstone House Hospital	Lady Home Hospital	Lockhart Hospital	Stonehouse Hospital	Kello Hospital	Park Springs Hospital	Totals
01/2010	0	1	0	0	0	0	1
02/2010	0	0	1	0	1	0	2
03/2010	0	0	0	0	1	0	1
04/2010	0	0	0	0	0	1	1
07/2010	1	0	0	0	2	0	3
08/2010	1	0	0	1	0	0	2
09/2010	0	0	0	0	0	2	2
Totals	2	1	1	1	4	3	12

Table 5 above shows Clostridium difficile infection rates by month for Community Hospitals since January 2010 and demonstrates no data for May, June or October as there were no cases identified. Lady Home have reported no cases since January 2010 and Lockhart Hospital no cases since February 2010

Table 6: Hand Hygiene Compliance Acute Hospital

Date range: 01/01/2010 – 31/10/2010

% Compliance with Hand Hygiene by Acute Hospital Site and Month



Note: where 0% compliance is displayed in the table, this indicates that no data exists for this time period.

	Halmmyres			Monklands			Wishaw		
	Total Observations	Total Performed Correctly	% Compliance	Total Observations	Total Performed Correctly	% Compliance	Total Observations	Total Performed Correctly	% Compliance
01/2010	1420	1244	88	1424	1386	97	1888	1754	93
02/2010	1474	1368	93	1755	1673	95	2070	1990	96
03/2010	1766	1653	94	2191	2126	97	2435	2329	96
04/2010	1559	1481	95	1898	1834	97	2325	2255	97
05/2010	1973	1876	95	2275	2205	97	2489	2388	96
06/2010	1863	1781	96	2068	2014	97	2497	2397	96
07/2010	2071	1953	94	2165	2105	97	2531	2453	97
08/2010	2242	2169	97	2566	2507	98	2857	2799	98
09/2010	2137	2069	97	2292	2238	98	2624	2573	98
10/2010	2129	2074	97	2240	2202	98	2647	2589	98

5. Hand Hygiene

Hand Hygiene compliance has remained static on all sites and $\geq 97\%$. There are no exceptions to report and a full update on initiatives will be presented in the December HAIRT

6. Cleaning and the Healthcare Environment

- Vacuums have been delivered supported by the appropriate staff training programme and have been introduced in some wards / departments. Delivery of outstanding vacuums is expected to be completed mid November.
- Further training has taken place in relation to the use of steam cleaners. A programme for cleaning of sanitary areas utilising steam cleaners is being developed across all NHSL sites. Further detail will be provided in the December HAI RT Report.

7. Outbreaks/Incidents

- There has been an increased incidence of Surgical Site Infection in caesarean section wounds in September 2010. No exceptions report has currently been issued from HPS. Surveillance has shown that off the 9 superficial infections reported, 7 were diagnosed post operatively (within 10 days of discharge) The Microbiologist, Infection Control Nurses, Surveillance and Hand Hygiene teams are fully involved and continue to monitor the situation.

There is a meeting on the 24th of November comprising of the Infection Control Team, Hand Hygiene Coordinator, Surveillance Nurses, Nurse Consultant- HAI, the Lead ICD, an

Obstetric Clinician and Senior Nurses from maternity services to review previous action plan. Audits of the environment and hand hygiene practice are being undertaken.

- There was an increased incidence of *Stenotrophomonas maltophilia* within ITU at Hairmyres. Growth of *Stenotrophomonas maltophilia* from the ITU environment is a normal phenomenon and would only be of concern if it was linked to acquisition by a patient manifested as infection or carriage. Adherence to good infection control practices and regular disinfection of colonised sinks in the ITU has demonstrated that the risk of acquisition by patients can be substantially reduced. Manual cleaning and disinfection of all sink aerators, drains and U-bends within the unit commenced on Monday 01/11/10. A robust surveillance system remains in place where all new isolates are referred immediately to the ICN for prompt investigation.
- There have been 3 cases of *carbapenem reduced susceptibility Klebsiella* identified within NHSL. They do not appear to be linked and at present there is nothing to suggest there has been either cross transmission or environmental contamination. NHSL Health Protection Team and Health Protection Scotland have been informed. Reports of carbapenem resistant organisms are starting to appear from around Scotland. At present there are no formal UK or Scottish guidelines on infection control measures to contain these organisms although these are being developed. In the interim it has been suggested we use the CDC- Healthcare Infection Control Practices Advisory Committee (HICPAC). Infection Control have requested enhanced cleaning of the ward area and the Infection Control Team are meeting on Monday 22nd November to review the guidance and discuss management of any further cases and demands on isolation facilities that will arise .

Recommendation

The Board is asked to note this report.

For further information or clarification of any issues in this paper please contact: Dr Alison Graham, Medical Director, 14 Beckford Street, Hamilton, 01698 206385.